



# **Computer Setup (F10) Utility Guide**

HP Business Desktops  
dx5150 model

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This guide provides instructions on how to use Computer Setup. This tool is used to reconfigure and modify computer default settings when new hardware is installed and for maintenance purposes.

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directions could result in damage to equipment or loss of information.

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## **Computer Setup (F10) Utility Guide**

HP Business Desktops

First Edition (December 2004)

Document Part Number: 374172-001

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# Computer Setup (F10) Utility

## Computer Setup (F10) Utilities

Use Computer Setup (F10) Utility to do the following:

- Change factory default settings.
- Set the system date and time.
- Set, view, change, or verify the system configuration, including settings for processor, graphics, memory, audio, storage, communications, and input devices.
- Modify the boot order of bootable devices such as hard drives, diskette drives, optical drives, or USB flash media devices.
- Enable or disable Quick Power-On Self Test, which is faster than a full boot but does not run all of the diagnostic tests run during a full boot.
- Enter the Asset Tag or property identification number assigned by the company to this computer.
- Establish a supervisor password that controls access to Computer Setup (F10) Utility and the settings described in this section.
- To secure integrated I/O functionality, including the serial, USB, or parallel ports, audio, or embedded NIC, so that they cannot be used until they are unsecured.
- Enable or disable Master Boot Record (MBR) Security.
- Enable or disable removable media boot ability.
- Enable or disable legacy diskette write ability (when supported by hardware).

## Using Computer Setup (F10) Utilities

Computer Setup can be accessed only by turning the computer on or restarting the system. To access the Computer Setup Utilities menu, complete the following steps:

1. Turn on or restart the computer. If you are in Microsoft Windows, click **Start > Shut Down > Restart**.
2. As soon as the computer is turned on, press and hold the **F10** key until you enter Computer Setup.



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If you do not press the **F10** key at the appropriate time, you must restart the computer and press and hold the **F10** key again to access the utility.

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3. The Computer Setup Utility screen is divided into menu headings and actions.

Eight menu headings appear on the Computer Setup Utility screen:

- ☐ System Information
- ☐ Standard CMOS Features
- ☐ Advanced BIOS Features
- ☐ Advanced Chipset Features
- ☐ Integrated Peripherals
- ☐ Power Management Setup
- ☐ PnP/PCI Configurations
- ☐ PC Health Status

Five action choices are listed on the Computer Setup Utility screen:

- ☐ Load Optimized Defaults
- ☐ Set Supervisor Password
- ☐ Set User Password
- ☐ Save & Exit Setup
- ☐ Exit Without Saving

Use the arrow keys to select the appropriate heading, then press **Enter**. Use the arrow (up and down) keys to select the option you want, then press **Enter**. To return to the previous screen, press **Esc**.

4. To apply and save changes, press **F10** or select **Save & Exit Setup** on the Computer Setup Utility screen and press **Enter**.

If you have made changes that you do not want applied, select **Exit Without Saving** and press **Enter**.



**CAUTION:** Do NOT turn the computer power OFF while the ROM is saving the F10 Computer Setup changes because the CMOS could become corrupted. It is safe to turn off the computer only after exiting the F10 Setup screen.


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**Computer Setup**


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Heading	Option	Description
System Information	Displays	Product Name
		Processor Type
		Cache Size
		Memory Size
		System ROM
		Integrated MAC
		UUID
		System Serial #
		Asset Tag
Standard CMOS Features	Date (mm:dd:yy)	Allows you to set system date.
	Time (hh:mm:ss)	Allows you to set system time.
	PATA IDE Channel 0 Master	For each, allows you to:
	PATA IDE Channel 0 Slave	
	SATA IDE Channel 1 Master	
	SATA IDE Channel 2 Master	
		<ul style="list-style-type: none"> <li>• enable/disable auto-detection of HDD size and head</li> <li>• set IDE to: <ul style="list-style-type: none"> <li>• None</li> <li>• Auto</li> <li>• Manual</li> </ul> </li> <li>• set access mode to <ul style="list-style-type: none"> <li>• CHS</li> <li>• LBA</li> <li>• Large</li> <li>• Auto</li> </ul> </li> </ul>
	Drive A	Allows you to set Drive A to Disabled or Auto.
	Floppy 3 Mode Support	Disables/sets diskette drive support to Drive A
 Support for specific Computer Setup options may vary depending on the hardware configuration.		

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**Computer Setup** (Continued)

Heading	Option	Description
Standard CMOS Features (continued)	Halt On	Allows you to set at: <ul style="list-style-type: none"> <li>• All Errors</li> <li>• No Errors</li> <li>• All but Keyboard</li> <li>• All but Diskette</li> <li>• All but Diskette/Keyboard</li> </ul>
	POST Delay	Allows you to set a POST delay.
Advanced BIOS Features	Removable Device Boot Priority	Allows you to specify the order in which attached devices (such as an FDD, an LS120, or a Zip Drive) are checked for a bootable operating system image.
	Hard Disk Boot Priority	Allows you to specify the order of attached hard drive devices (such as USB HDD storage, USB2 DriveKey, or USB flash media). The first drive in the order has priority in the boot sequence and is recognized as drive C (if any devices are attached).
	CD-ROM Boot Priority	Allows you to specify the order in which attached CD-ROM drives (including USB ODD) are checked for a bootable operating system image.
	Network Boot Priority	Allows you to specify the order in which network devices (including UP NIC cards) are checked for a bootable operating system image.
 Support for specific Computer Setup options may vary depending on the hardware configuration.		

**Computer Setup** (Continued)

Heading	Option	Description
Advanced BIOS Features (continued)	MBR Security	Enables/disables the VIRUS warning feature for IDE Hard Disk boot sector protection. When this function is enabled and someone attempts to write data into this area, the BIOS responds with a warning message on screen and an alarm beep.
	Quick Power On Self Test	Enables/disables the system to skip certain tests while booting. Enabling this feature decreases the time required to boot the system.
	First Boot Device	 MS-DOS drive lettering assignments may not apply after a non-MS-DOS operating system has started.
	Second Boot Device	
	Third Boot Device	
	Fourth Boot Device	
	Boot Up NumLock Status	Allows you to set the default NumLock status on or off.
	APIC Function	Enables/disables the APIC support.
	MPS Version Control for OS	Allows you to set the MPS version for the OS.
Advanced Chipset Features	HDD S.M.A.R.T. Capability	Enables/disables S.M.A.R.T. capability on the hard drive.
	BIOS Write Protection	Enables/disables BIOS write protection.
	Internal Video Mode	Disables/selects internal video mode.
	AGP Aperture Size	Allows you to set the AGP aperture size.
	UMA Frame Buffer Size	Allows you to set the size of the UMA frame buffer.
	Video Display Devices	Allows you to select the video display devices.
	 Support for specific Computer Setup options may vary depending on the hardware configuration.	

**Computer Setup** (Continued)

Heading	Option	Description
Advanced Chipset Features (continued)	Auto Detect PCI Clk	Enables/disables PCI Clk auto detection.
	Spread Spectrum	Enables/disables spread spectrum.
Integrated Peripherals	South OnChip IDE Device	Allows you to enable/disable IDE devices.
	South OnChip PCI Device	Allows you to: <ul style="list-style-type: none"> <li>• enable/disable Onboard AC97 Audio</li> <li>• select <ul style="list-style-type: none"> <li>• SATA Disabled</li> <li>• IDE Controller (non-RAID)</li> <li>• RAID Controller</li> </ul> </li> <li>• enable/disable: <ul style="list-style-type: none"> <li>• Onboard LAN</li> <li>• Onboard LAN Boot ROM</li> </ul> </li> </ul>
	Init Display First	Allows you to select the primary VGA source.
	Surroundview	Allows you to enable/disable Surroundview only if PCI-E GFX add-on card is ATI.
	OnChip USB Controller	Enables/disables the USB controller.
	Front Panel USB Port	Enables/disables the front panel USB ports.
	Onboard FDC Controller	Enables/disables onboard FDC controller.
	Onboard Serial Port	Allows you to disable or select setting for the onboard serial port.
	Onboard Parallel Port	Allows you to disable or select setting for onboard parallel port.
 Support for specific Computer Setup options may vary depending on the hardware configuration.		


**Computer Setup** (Continued)

Heading	Option	Description
Integrated Peripherals (continued)	Parallel Port Mode	Allows you to select parallel port mode.
	ECP Mode Use DMA	If Parallel Port Mode is set to ECP or ECP+EPP, allows you to set the ECP Mode Use DMA to 1 or 3.
Power Management Setup	ACPI Function	Enables/disables ACPI functions.
	ACPI Suspend Type	Allows you to set type of ACPI suspend.
	After AC Power Loss	Allows you to select: <ul style="list-style-type: none"> <li>• Last State</li> <li>• On</li> <li>• Off</li> </ul>
	PowerOn by PCI Card	Enables/disables capability of powering on by PCI card.
	AMD Cool'n'Quiet	Allows you to set the AMD Cool'n'Quiet to auto or to disable it.
	RTC Alarm Resume	Enables/disables resumption of RTC alarm.
	Date (of Month)	If RTC Alarm Resume is enabled, allows you to select the day of the month for resumption of RTC alarm.
	Resume Time (hh:mm:ss)	If RTC Alarm Resume is enabled, allows you to select what time the RTC alarm will resume.
PnP/PCI Configuration	Reset Configurations Data	Enables/disables automatic reconfiguration. Default is Disabled. Select Enabled to reset Extended System Configuration Data (ESCD) when you exit Setup, if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the OS cannot boot.




Support for specific Computer Setup options may vary depending on the hardware configuration.

**Computer Setup** (Continued)

Heading	Option	Description
PnP/PCI Configuration (continued)	Resources Controlled By	Allows you to select whether resources are controlled automatically or manually. BIOS can automatically configure all the boot and Plug-and-Play-compatible devices. If you choose Auto, you cannot select IRQ DMA and memory base address fields, since BIOS automatically assigns them.
	IRQ Resource	When resources are controlled manually, allows you to assign each system interrupt a type, depending on the type of device using the interrupt.  Legacy ISA for devices compliant with the original PC AT bus specification, PCI/ISA PnP for devices compliant with the Plug and Play standard whether designed for PCI or ISA bus architecture.
	<ul style="list-style-type: none"> <li>• IRQ-3 assigned to</li> <li>• IRQ-4 assigned to</li> <li>• IRQ-5 assigned to</li> <li>• IRQ-7 assigned to</li> <li>• IRQ-10 assigned to</li> <li>• IRQ-11 assigned to</li> <li>• IRQ-12 assigned to</li> <li>• IRQ-14 assigned to</li> <li>• IRQ-15 assigned to</li> </ul>	
	PCI/VGA Palette Snoop	Enables/disables PCI/VGA palette snoop.
	Assign IRQ for VGA	Enables/disables capability of assigning IRQ for VGA.
	Assign IRQ for USB	Enables/disables capability of assigning IRQ for USB.
PC Health Status	System Information	Lists: <ul style="list-style-type: none"> <li>• CPU Temperature</li> <li>• System Temperature</li> <li>• CPU Fan Speed</li> <li>• System Fan Speed</li> </ul>
 Support for specific Computer Setup options may vary depending on the hardware configuration.		

**Computer Setup** *(Continued)*

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Heading	Option	Description
Load Optimized Defaults		Allows you to reset Computer Setup to factory defaults.
Set Supervisor Password		Allows you to establish a password to control access to Computer Setup.
Set User Password		Allows you to establish a password to control access to the computer.
Save & Exit Setup		Allows you to save current settings and exit Computer Setup.
Exit Without Saving		Allows you to exit Computer Setup without saving changes.
 Support for specific Computer Setup options may vary depending on the hardware configuration.		

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## Recovering the Configuration Settings

Recovering the configuration settings established in the Computer Setup (F10) Utility requires that you first back up the settings before a recovery is needed.

The CMOS Save/Load utility ROMPAQ can be found at <http://www.hp.com> under the support and drivers for the HP Business Desktop dx5150. Download the ROMPAQ files into a folder on a removable storage device. It is recommended that you save any modified computer configuration settings to a diskette, a USB flash media device, or a diskette-like device (a storage device set to emulate a diskette drive) and save the diskette or device for possible future use.

## Backing up the CMOS

1. Make sure the computer to be backed up is turned on. Connect the removable storage to the computer.
2. In Windows, click **Start > Run**, type **CMD**, and click **OK** to open a DOS command window.
3. Type **N:\folder\BIOS.exe SAVE:ABC001.DAT** (where *N* is the drive letter of the removable storage) to save the CMOS setting to the removable storage device.

## Restoring the CMOS

1. Make sure the target computer is turned on. Connect the removable storage to the target computer.
2. In Windows, click **Start > Run**, type **CMD**, and click **OK** to open a DOS command window.
3. Type **N:\folder\BIOS.exe LOAD:ABC001.DAT** (where *N* is the drive letter of the removable storage) to load the custom CMOS setting onto the target system.